

ABSTRACT

A one piece, double gland, quad lobe design gasket system for use in a projection system that redundantly seals in the liquid present in a coupler supporting a projection lens in alignment with a projection optical signal generation device (e.g., a Cathode Ray Tube). The coupler defines a cooling chamber between said projection lens and said projection signal generating device and is filled with liquid in order to transport the optical signal between the projection optical signal generation device and projection lens while minimizing contrast distortion. In order to prevent leaking from the cooling chamber between the coupler and projection signal generation device, an improved sealing system is used by providing two separate channels in the coupler and using the integral double gland, quad lobe gasket. Each gland is placed in a corresponding groove in the coupler thus creating two separate lines of seal that keeps the liquid in the coupler from leaking out. The integral redundant dual gland system also prevents air from leaking into the sealed liquid chamber preventing contrast distortion. The coupler with bubble trap is used for example in projection televisions.